

WHAT IS CLAIMED IS:

1. An electronic self contained viscous liquid dispenser, comprising:
a housing defining an internal liquid reservoir, said housing including a front surface having an opening therethrough adjacent a bottom surface of said reservoir;
5 a dispensing pump mechanism carried by said housing and disposed in liquid communication with said reservoir, said pump mechanism having a delivery end disposed for delivering metered doses of viscous liquid from said reservoir;
a mounting assembly configured for mounting on a supporting wall structure, said housing releasably attachable to said mounting assembly;
10 an electronic actuating mechanism carried by said mounting assembly and comprising a motor driven actuator that engages with said pump mechanism upon insertion of said housing into said mounting assembly; and
a motor and associated power supply circuitry carried by said mounting assembly, said motor in driving engagement with said motor driven actuator.
2. The dispenser as in claim 1, wherein said dispensing pump mechanism comprises a linearly slidable cylinder having a delivery channel defined therethrough terminating at said delivery end, said cylinder being slidable within a substantially horizontally disposed pump chamber defined within said
5 reservoir, said motor driven actuator slidable in a horizontal path to engage and move said cylinder to a dispensing position within said pump chamber.
3. The dispenser as in claim 2, wherein said cylinder is drivingly engaged by said motor driven actuator as it is moved from a rest position to a dispensing position and drivingly disengaged with said motor driven actuator as it moves from said dispensing position to said rest position.
4. The dispenser as in claim 2, wherein said pump chamber is formed integral with said housing within said reservoir and has a back end open to said reservoir and a front end open to the outside of said housing, said delivery end of said pump cylinder extending out of said front end of said chamber and engaged
5 by said motor driven actuator.
5. The dispenser as in claim 1, wherein said motor comprises an off-center drive cam engaged within a elongated cam surface defined in said motor

driven actuator such that rotational movement of said motor is converted to linear movement of said motor driven actuator.

6. The dispenser as in claim 5, wherein said motor driven actuator comprises an elongated plate member slidably supported in said mounting assembly at a position below said housing, said plate member having a front end engaged with said pump mechanism, said slot defined in an opposite back end of said plate member, and further comprising an opening defined in said front end of said plate member aligned with said delivery end of said pump mechanism.

7. The dispenser as in claim 1, further comprising a battery power supply carried by said mounting assembly.

8. The dispenser as in claim 1, wherein said mounting assembly comprises an enclosed back unit mountable against the supporting wall structure, said motor and associated power supply contained within said back unit, said motor driven actuator horizontally disposed below said back unit.

9. The dispenser as in claim 8, wherein said housing is supported entirely by said back unit.

10. The dispenser as in claim 9, further comprising a mounting mechanism configured between said housing said back unit, said mounting mechanism comprising a mounting bracket provided on said back unit and a recess formed integrally in a back side of said housing, said recess further comprising side walls having engaging structures defined thereon for engagement with complimentary structure provided on said mounting bracket.

11. The dispenser as in claim 10, wherein said recess has dimensions so that said complimentary structure on said mounting bracket fits entirely within said recess, wherein upon mounting said housing to said mounting assembly, said back side of said housing is flush against a front wall of said back unit.

12. The dispenser as in claim 1, wherein said mounting assembly comprises an enclosed top unit disposed above said housing, said motor and associated power supply contained within said top unit, said motor driven actuator horizontally disposed below said housing, and further comprising a gear drive between said motor and said motor driven actuator.

13. The dispenser as in claim 1, wherein said mounting assembly comprises a base unit, said motor driven actuator slidable within said base unit.

14. The dispenser as in claim 13, wherein said housing is restable on said base unit.

15. The dispenser as in claim 13, wherein said housing is supported by said mounting assembly above said base unit.

16. The dispenser as in claim 13, wherein said motor and associated power supply are contained in said base unit.

17. The dispenser as in claim 1, wherein said electronic actuating mechanism comprises a manual initiator.

18. The dispenser as in claim 1, wherein said electronic actuating mechanism comprises a sensor configured to actuate said electronic actuating mechanisms upon sensing the presence of a user.

19. The dispenser as in claim 1, wherein said housing further comprises a manual actuator configured with said dispensing pump mechanism.

20. An electronic self contained viscous liquid dispenser, comprising:

a housing defining an internal liquid reservoir, said housing including a substantially vertical back side and a front surface having an opening therethrough adjacent a bottom surface of said reservoir;

5 a dispensing pump mechanism carried by said housing and disposed in liquid communication with said reservoir, said pump mechanism having a delivery end disposed for delivering metered doses of viscous liquid from said reservoir;

a recess defined in said substantially vertical back side, said recess comprising engaging structure defined therein for engagement with complimentary structure of a wall bracket provided on a supporting wall surface;

10 a drive module mountable on the supporting wall surface below the wall bracket, said drive module further comprising a motor driven actuator that engages with said pump mechanism upon attachment of said housing to the wall bracket; and

15 a motor and associated power supply carried by said drive module, said motor in driving engagement with said motor driven actuator.

21. The dispenser as in claim 20, wherein said dispensing pump mechanism comprises a linearly slidable cylinder having a delivery channel defined therethrough terminating at said delivery end, said cylinder being slidable within a substantially horizontally disposed pump chamber defined within said reservoir, said motor driven actuator slidable in a horizontal path to engage and move said cylinder to a dispensing position within said delivery channel.

22. The dispenser as in claim 21, wherein said cylinder is drivingly engaged by said motor driven actuator as it is moved from a rest position to a dispensing position and drivingly disengaged with said motor driven actuator as it moves from said dispensing position to said rest position.

23. The dispenser as in claim 21, wherein said pump chamber is formed integral with said housing within said reservoir and has a back end open to said reservoir and a front end open to the outside of said housing, said delivery end of said pump cylinder extending out of said front end of said chamber and engaged by said motor driven actuator.

24. The dispenser as in claim 20, wherein said motor comprises an off-center drive cam engaged within a elongated cam surface defined in said motor driven actuator such that rotational movement of said motor is converted to linear movement of said motor driven actuator.

25. The dispenser as in claim 24, wherein said motor driven actuator comprises an elongated plate member slidably supported in said drive module at a position below said housing, said plate member having a front end engaged with said pump mechanism, said slot defined in an opposite back end of said plate member, and further comprising an opening defined in said front end of said plate member and aligned with said delivery end of said pump mechanism.

26. The dispenser as in claim 20, wherein said power supply comprises a battery power supply.

27. The dispenser as in claim 20, wherein said housing is supported entirely by the wall bracket on the supporting wall surface.

28. The dispenser as in claim 27, wherein said recess further comprises side walls having engaging structures defined thereon for engagement with complimentary structure provided on the mounting bracket.

29. The dispenser as in claim 28, wherein said recess has dimensions so that the complimentary structure on the mounting bracket fits entirely within said recess, wherein upon mounting said housing to the mounting bracket, said back side of said housing is flush against the supporting wall surface.

30. The dispenser as in claim 20, wherein said housing is supported at least partially by said drive module.

31. The dispenser as in claim 20, wherein said drive module comprises a manual initiator configured with said actuator.

32. The dispenser as in claim 20, wherein said drive module comprises a sensor configured with said actuator to actuate said actuator upon sensing the presence of a user in proximity to said sensor.

33. The dispenser as in claim 20, wherein said housing further comprises a manual actuator configured with said dispensing pump mechanism.